

Peter ~~Ray~~  
Ray RLS

## MONITOR WELL PRE-SPUD PROPOSAL

- 1) WELL NAME/NUMBER: 700-A
  
- 2) PROPOSED LOCATION: (a) General (on or off-site) On-site  
(attach map Site Area 700-Area Landfill)  
(b) Sect 26 Twnshp 20S Rng 3E NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$
  
- 3) WELL PARAMETERS:  
(a) Est. total depth 400 (ft) (b) Est. ground elevation 4912 ft  
(c) Anticipated stratigraphy:  
Alluvium (Santa Fe Group) from 0 ' to 190 ' (depth)  
Limestone from 190 ' to TD ' (depth)  
(d) Anticipated water bearing horizon(s):  
Limestone at 200 ' (depth)  
(Look for a productive fracture(s))  
(e) Anticipated static water level 250 ' (depth)
  
- 4) WELL PURPOSE/JUSTIFICATION (attach maps and table if needed):  
Investigate groundwater quality adjacent to the 700 Area Landfill.
  
- 5) PROPOSED DRILLING PARAMETERS:  
(a) Drilling method(s): (air/foam/mud rotary/auger/etc.)  
Mud Rotary from 0 ' to 100 (max) ' (depth)  
Air-Foam Rotary from 100 ' to TD ' (depth)

Air-foam method: "Quik-Foam" surfactant/water mixture used in conjunction with filtered compress air.

Mud-rotary method: Bentonite mud/water mixture.

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- (b) Lithology sampling - collect sample every:

5' intervals Method Grab from 0 ' to TD ' (depth)  
Core type 6" Dennison from \_\_\_\_\_ ' to None ' (depth)  
2" Christiansen from \_\_\_\_\_ ' to None ' (depth)

- (c) Anticipated drilling additive(s): None

7) **PROPOSED WELL COMPLETION DESIGN/MATERIALS**

(a)	Casing:	<u>Material</u>	<u>Diameter</u>	<u>From</u>	<u>To</u>	<u>Comments</u>
	Temporary	_____	_____	_____	_____	_____
	Surface	_____	<u>10"</u>	<u>0</u>	<u>100' max</u>	_____
	Screen (10')	<u>stainless ++</u>	<u>4"</u>	<u>determine from geophysical logs</u>		
	Completion Pipe	<u>stainless +</u>	<u>4"</u>	<u>0</u>	<u>TD</u>	<u>*</u>

Standard material: Blank riser, silt trap, locking cap

N/A Data not available at this time

\* for deep completions (450 feet or more)

\*\* for shallow completions

+ Type 304, Schedule 5 stainless steel  
Type 304, Schedule 10 stainless steel

++ Regular strength screen, extra strength screen used below 450 feet

- (b) Filter pack: Standard 8/20 and 16/40 sand and bentonite plug(s), grout to surface.

8) **PROPOSED WELL DEVELOPMENT**

- (a) Surge and bail with surge block and bailer.
- (b) Pump with submersible pump until parameters stabilize.

9) **WELL AUTHORIZATION**

- (a) Proposed by Geoscience Consultants, Ltd.

- (b) Authorized Robert Mitchell NASA  
(name) (representing)

  
(signature)

